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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,191	02/26/2002	Yuji Ariyoshi	401587	4662

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EXAMINER

MACK, COREY D

ART UNIT PAPER NUMBER

2855

DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/082,191

Applicant(s)

ARIYOSHI, YUJI

Examiner

Corey D. Mack

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawai, et al. (US 5,965,811).

A. With respect to Claim 1, Kawai, et al. disclose a flow measuring apparatus for measuring flow of a fluid based on a difference in radiation of heat at an upstream side and at a downstream side of a heating member located in the flow of the fluid, comprising: a heating member 4; an upstream temperature sensor 5 located at an upstream side of the heating member for measuring a first temperature; a downstream temperature sensor 6 located at a downstream side of the heating member for measuring a second temperature; and a circuit (not shown) for controlling power supplied to the heating member to maintain an average temperature of the first temperature measured by the upstream temperature sensor and the second temperature measured by the downstream temperature sensor at a fixed temperature (column 6, line 65 – column 7, line 15).

B. With respect to Claim 2, Kawai, et al. disclose that the flow of the fluid 10 is calculated from the difference between the first temperature measured by the upstream temperature sensor 5 and the second temperature measured by the downstream temperature sensor 6 (column 6, line 65 – column 7, line 15).

C. With respect to Claim 3, Kawai, et al. disclose an upstream heating member 11 located between the heating member 4 and the upstream temperature sensor 5 for generating heat based on power supplied to the upstream heating member and controlled by the circuit; and a downstream heating member 11 located between the heating member 4 and the downstream temperature sensor 6 for generating heat based on power supplied to the downstream heating member and controlled by the circuit, wherein the circuit controls the power supplied to the upstream heating member and to the downstream heating member to maintain the first temperature measured by the upstream temperature sensor and the second temperature measured by the downstream temperature sensor substantially equal and the flow of the fluid is measured based on the difference between the respective powers (column 18, lines 4-29).

D. With respect to Claim 4, Kawai, et al. disclose that the circuit modifies the fixed temperature based on temperature of the fluid (column 6, line 30 – column 7, line 24).

E. With respect to Claim 5, Kawai, et al. disclose the circuit modifies the fixed temperature based on the flow of the fluid (column 6, line 30 – column 7, line 24).

*Allowable Subject Matter*

4. Claims 6-8 are allowed. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, alone or in combination, fails to teach a flow measuring apparatus comprising six thermally sensitive resistors arranged in a row from an upstream side to a downstream side, each resistor generating heat and sensing temperature; and a circuit for controlling power supplied to each of the thermally sensitive resistors having the claimed functionality.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey D. Mack whose telephone number is (703) 305-3424. The examiner can normally be reached on M-F, 8:30-4:30.

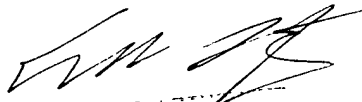
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (703) 305-4816. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

CDM

Corey D. Mack, Esq.  
Patent Examiner  
Art Unit 2855

January 21, 2004

  
EDWARD LEFKOWITZ  
SUPERVISOR